



# Access Management Plan

This plan provides documentation on the appropriate access management classification and design criteria required for the proposed SR 87 Connector Project from US 90 to SR 87 N in Milton.

# Santa Rosa County Florida

**Financial Project No(s):** 

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#### 1.0 INTRODUCTION

The primary objective of this SR 87 Connector project is to extend SR 87S to facilitate north/south traffic movement to more effectively serve freight movement and to provide for a more direct hurricane evacuation route. It also is the intent to reduce congestion in the City of Milton and to alleviate travel demand on the section of US 90 currently shared by SR 87. Versions of this project have gone through Efficient Transportation Decision Making (ETDM) screening as ETDM Project # 2861 in 2008. However, that project was much more limited in scope and only evaluated a corridor from SR 87S to Munson Highway. On December 19, 2009, the SR 87 Connector project was submitted for ETDM review as Project #12597.

The Public Hearing for the SR 87 Connector PD&E was held November 13, 2014. Comments from the hearing about the proximity of Alternative 2 to homes on the west side of SR 87N, as well as to homes in the newly developed Harvest Point Subdivision, prompted the study team to reevaluate the intersection location of Alternative 2 and SR 87N. After reviewing the public information summary of the public hearing, the study team adjusted Alternative 2 slightly north to a previously reviewed alignment.

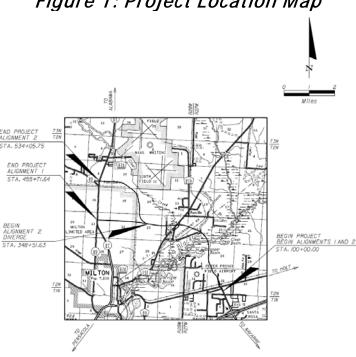


Figure 1: Project Location Map

SR 87 Connector PD&E Study Access Management Plan 1 April 2015



## 2.0 NEED FOR IMPROVEMENTS

SR 87 is the main north-south highway of Santa Rosa County. It links Milton at US 90 with US 98 at Navarre to the south and Alabama (transitions to Alabama 41 en route to Brewton then on to I-65) to the north. It also serves as a corridor for freight movement north to I-65, as well as, a vital evacuation route for northbound traffic. During times of hurricane force winds, both the Escambia Bay Bridge and the Garcon Point Bridge close, leaving SR 87 as the only route out of the beach areas such as Gulf Breeze and Navarre. In addition, it is the only access into the area for Emergency First Responders. However, it cannot function as a contiguous facility because a portion of the current alignment travels along a congested portion of US 90, through historic downtown Milton.

This project is needed to provide for a new roadway facility linking SR 87S with SR 87N. The SR 87 Connector will serve as an alternative to the existing shared facility of SR 87 and US 90, which is a constrained facility that is currently operating at a failing level of service (LOS F). Therefore, the primary need for this new corridor is to provide additional capacity and to improve regional connectivity by providing a more direct route from areas of high growth in northern Santa Rosa County, such as the Berryhill Road area, to I-10 and to areas further to the south. Likewise, access will be improved to and from I-10 for the Whiting Field U.S. Naval Air Station and the County's Joint Use Planning Area near Whiting Field. It is anticipated that this new facility will provide relief to Ward Basin Road and its intersection with US 90. It is also intended to provide much needed relief to the US 90 Blackwater River Bridge.



## 3.0 PROJECT DESCRIPTION

The project is to construct a 4-lane divided urban/rural highway to bypass the City of Milton. The interim construction will be a 2-lane urban/rural highway, as discussed in Section 4.2, Typical Sections. The recommended alternatives, Alignment 1 and Alignment 2, share an alignment for 4.7 miles to a location just west of the proposed Clear Creek Bridge and west of Winston Brown Road. Each alignment has the same two proposed bridges: 1) over Blackwater River and the Blackwater River Heritage Trail, and 2) over Clear Creek. Both alignments have at grade roadway connections to Munson Highway (CR 191) and Winston Brown Road, but close access to Pat Brown Road, an unpaved side street. The Blackwater River Bridge is a low level bridge which extends over Pat Brown Road but does not provide vertical clearance to allow for vehicular traffic under the bridge. Pat Brown road will be reconstructed so that cul-de-sacs are provided at each end adjacent to the proposed bridge. There are also proposed connections for multi-use facilities between the Blackwater Heritage Trail and the SR 87 Connector.

# 4.0 PROPOSED ALIGNMENTS & ACCESS MANAGEMENT CLASSIFICATIONS

## 4.1 Proposed Alignments

As discussed in Section 3.0, Project Description, there are two recommended alignments for this project. Alignment 1 begins just south of the US 90 and SR 87S intersection and continues 6.7 miles. The first 4.7 miles of Alignment 1 is also the same for Alignment 2. The end point on Alignment 1 is a connection to SR 87N near Oakland Drive (approximately 1 mile north of the city limits of Milton). The proposed alignment closely follows the existing alignment of SR 87S near US 90 and East Milton Road, but corrects the horizontal curves allowing for a normal crown roadway through the intersection. The proposed horizontal alignment provides a safer and "easier" ride through the US 90 intersection and along East Milton Road.



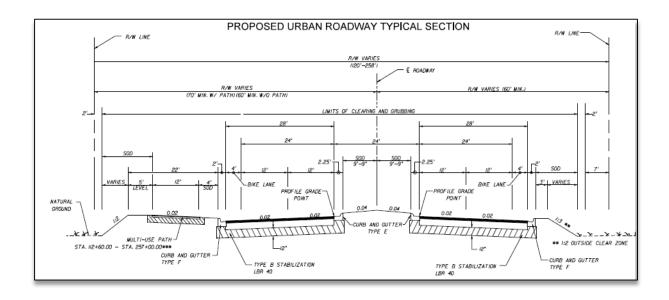
Alignment 2 splits off of Alignment 1 and proceeds north for an additional 3.5 miles. The Alignment 2 end point connects to SR 87N and SR 89N at Season Drive. The total length of Alignment 2 is 8.2 miles.

In general, most horizontal curves along Alignments 1 and 2 are designed to provide a normal crown roadway and avoid "full" super-elevated curves. The project also includes storm drain collection systems, detention ponds (both dry and wet), bicycle and pedestrian facilities, signing and pavement markings, and signalization modifications at the beginning and ending connection points.

## 4.2 Typical Sections

There are two proposed typical sections for the final build out (4-lane divided highway) which are shown in *Figure 2* and two proposed typical sections for the interim construction (2-lane undivided highway) as shown in *Figure 3*. The proposed typical sections include an urban typical from the beginning of the project at US 90 and extending to the Blackwater River Bridge. The urban typical is also applicable to the alignments at the end connection to SR 87N. A rural typical section is used north of the Blackwater River Bridge and extends near the end of each alignment. The typical sections for the Blackwater River Bridge and Clear Creek Bridge are very similar, as each have the same bridge deck width. Bridge typical sections are shown in *Figures 4 and 5*. The southbound bridges will be built first to serve the interim 2-lane highway. The northbound bridges will be constructed when the roadway is widened for 4-lanes.

The urban 4-lane roadway consists of two 12' lanes in each direction divided by a Type E curbed median, with a 4' outside bicycle lane, Type F curb and gutter on the outside lanes, and a 12' multi-use path on the west/south side. The rural 4-lane roadway consists of two 12' lanes in each direction divided by a 40' grassed median, with a 5' outside bicycle lane/paved shoulder, and ditches.



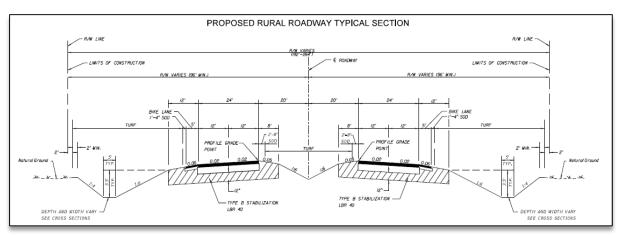
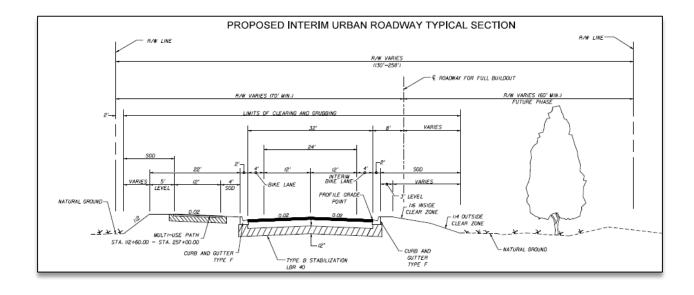


Figure 2: Proposed Build-Out Typical Sections





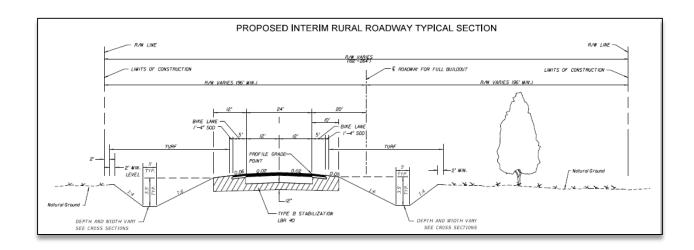


Figure 3: Proposed Interim Typical Sections



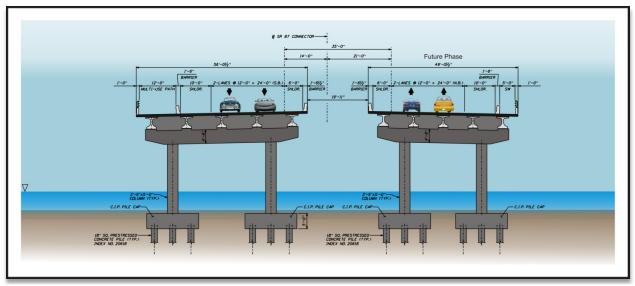


Figure 4: Blackwater River Bridge Typical Section

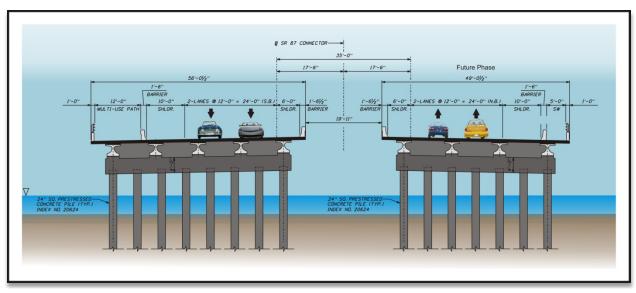


Figure 5: Clear Creek Bridge Typical Section



## 4.3 Access Management Criteria

The Florida Department of Transportation (FDOT) classifies access on state facilities using a 7-tier access management system, as established in the Florida Administrative Code (F.A.C), Chapter 14-97. The classification system ranges from Access Class 1, reserved for limited access freeways, to Access Class 7, assigned to lower priority state highways in highly urbanized areas. The access management classifications for "Controlled Access Highways" are Access Classes 2 through 7 and are arranged from the most restrictive (Access Class 2) to the least restrictive (Access Class 7), as listed in *Table 1*.

Access Class	Median	Median Opening Spacing Standard (feet)		Signal Spacia (fee	Connection	
		Full	Directional	Posted Speed Greater than 45 MPH	Posted Speed of 45 MPH or Less	Spacing Standard (feet)
2	Restrictive	2,640	1,320	2,640	1,320	660
3	Restrictive	2,640	1,320	2,640	660	440
4	Non-Restrictive			2,640	660	440
5	Restrictive	2,640 - Posted Speed Greater than 45 MPH	660	2,640	440	245
		1,320 - Posted Speed of 45 MPH or Less		1,320		
6	Non-Restrictive			1,320	440	245
7	Both Median Types	660	330	1,320	125	125

Table 1: Access Management Standards for Controlled Access Facilities

The following paragraphs in this section are rules from the F.A.C., Chapter 14-97.003, verbatim.

Generally the highways serving areas without existing extensive development or properties without subdivided frontages will be classified at the top of the range (Classes 2, 3, and 4). Those roadways serving areas with existing moderate to extensive development or



subdivided properties will generally be classified in the lower classes of the range (Classes 5, 6, and 7). The standards for each class are further defined where the posted speed limit is greater than 45 MPH or where the posted speed limit is 45 MPH or less.

Access Class 2. These are highly controlled access facilities distinguished by the ability to serve high speed and high volume traffic over long distances in a safe and efficient manner. These highways are distinguished by a system of existing or planned service roads. This access class is distinguished by a highly controlled limited number of connections, median openings, and infrequent traffic signals. Segments of the State Highway System having this classification usually have the access restrictions supported by local ordinances and agreements with the Department.

Access Class 3. These facilities are controlled access facilities where direct access to abutting land will be controlled to maximize the operation of the through traffic movement. This class will be used where existing land use and roadway sections have not completely built out to the maximum land use or roadway capacity or where the probability of significant land use change in the near future is high. These highways will be distinguished by existing or planned restrictive medians and maximum distance between traffic signals and driveway connections. Local land use planning, zoning and subdivision regulations should be such to support the restrictive spacings of this designation.

Access Class 4. These facilities are controlled access highways where direct access to abutting land will be controlled to maximize the operation of the through movement. This class will be used where existing land use and roadway sections have not completely built out to the maximum land use or roadway capacity or where the probability of significant land use change in the near future is high. These highways will be distinguished by existing or planned non-restrictive median treatments.

Access Class 5. This class will be used where existing land use and roadway sections have been built out to a greater extent than those roadway segments classified as Access Classes



3 and 4 and where the probability of major land use change is not as high as those roadway segments classified Access Classes 3 and 4. These highways will be distinguished by existing or planned restrictive medians.

Access Class 6. This class will be used where existing land use and roadway sections have been built out to a greater extent than those roadway segments classified as Access Classes 3 and 4 and where the probability of major land use change is not as high as those roadway segments classified Access Classes 3 and 4. These highways will be distinguished by existing or planned non-restrictive medians or centers.

Access Class 7. This class shall only be used in urbanized areas where existing land use and roadway sections are built out to the maximum feasible intensity and where significant land use or roadway widening will be limited. This class shall be assigned only to roadway segments where there is little intended purpose of providing for high speed travel. Access needs, though generally high in those roadway segments, will not compromise the public health, welfare, or safety. Exceptions to standards in this access class will be considered if the applicant's design changes substantially reduce the number of connections compared to existing conditions. These highways can have either restrictive or non-restrictive medians.

Specific Authority 334.044(2), 335.188 FS. Law Implemented 334.044(10)(a), 335.188 FS. History–New 2-13-91.

## 4.4 Proposed Access Management Classifications

The proposed access management classifications were determined by matching adjacent facility classifications; as well as, using a practical approach based on existing land development and existing roadway connections. The southern end of the alignments follow the existing alignment of SR 87S for a short distance at the signalized intersection of US 90. SR 87S has an access management classification of 3. The northern end of the alignments connect to SR 87N which is an Access Class 3. The proposed alignment



between US 90 and the proposed Blackwater River Bridge is mostly developed land with driveway connections for access to the Sheriff's Office, Santa Rosa Correctional Institution, East Milton Park and commercial businesses. The remainder of the SR 87 Connector, from the Blackwater River Bridge north to SR 87N, is mostly timberland.

The SR 87 Connector should be Access Class 3, restrictive median spacing, to comply with FDOT's policy to assign an access classification of 2 or 3 to highways on the Florida Intrastate Highway System (FIHS) that are not freeways in order to preserve the safety and efficiency of the highways. Access Class 3 allows for full median openings to be constructed at each major connection along the SR 87 Connector. In addition, the proposed classification will also match the existing access management classifications on SR 87S and SR 87N.

See *Table 2* for proposed median opening spacing. The proposed median openings between US 90 and the Blackwater River Bridge meet the guideline of 2,640 feet for full openings and 1,320 feet for directional openings. All proposed openings north of the Blackwater River Bridge are primarily full median openings spaced within the 2,640 foot guideline, with the exception of the spacing between Season Drive and SR 87N on Alignment 2. The spacing between Season Drive and SR 87N is 1,107 feet and provides direct access to a residential subdivision. A directional opening is also proposed just east of SR 87N on Alignment 1 which follows the 1,320 foot guideline for directional openings. This will provide a directional opening on both the east/northbound and west/southbound lanes which will be accomplished by a raised island/traffic separator.

It should be noted that median opening spacing discussions in *Table 2* pertain to the 4-lane typical sections. The interim roadway (2-lane highway) will allow for access to all side streets and driveway connections, and will be classified as Access Class 4 until the full build out is constructed. The proposed roadway connections *should* be spaced based on the 440 foot guideline, although the existing driveway connections will be maintained. All of the proposed median openings should be adjusted during final design based on providing access to the final pond locations.



Proposed	Station		Applicable	Opening	Spacing to middle of next opening			
Class	(middle of opening)	Description	Alignment	Туре	Behind (ft)	Туре	Ahead (ft)	Туре
3	111+86.22	US 90	1, 2	Intersection /Full	-	-	1114	Intersection /Full
3	123+00.00	Bobby Brown Rd	1, 2	Intersection /Full	1114	Intersection /Full	1141	Intersection /Full
3	134+41.14	East Milton Rd	1, 2	Intersection /Full	1141	Intersection /Full	1158	Directional
3	145+99.33	Opportunity Dr	1, 2	Directional	1158	Intersection /Full	447	Directional
3	150+46.56	Shooting Range Entrance/ Driveway	1, 2	Directional	447	Directional	2453	Full
3	175+00.00	Median Opening	1, 2	Full	2453	Directional	8297	Intersection /Full
3	257+00.00	Median Opening	1, 2	Full	8297	Intersection /Full	2640	Intersection /Full
3	284+51.15	Munson Hwy	1, 2	Intersection /Full	2640	Full	2569	Intersection /Full
3	310+78.08	Winston Brown Rd	1, 2	Intersection /Full	2569	Intersection /Full	2994	Full
3	340+60.92	Median Opening	1, 2	Full	2994	Intersection /Full	3000	Full
3	370+60.92	Median Opening	1	Full	3000	Full	3000	Full
3	400+60.92	Median Opening	1	Full	3000	Full	3000	Full
3	430+60.92	Median Opening	1	Full	3000	Full	1206	Dual Directional
3	442+67.00	Median Opening	1	Dual Directional	1206	Full	1311	Intersection /Full
3	40+00.00	SR 87/SR 89	1	Intersection /Full	1311	Directional	-	-
3	361+36.35	Median Opening	2	Full	2680	Full	2680	Full
3	388+25.91	Median Opening	2	Full	2680	Full	2685	Intersection /Full
3	415+00.00	Trailride North Rd	2	Intersection /Full	2685	Full	2678	Full
3	441+78.36	Median Opening	2	Full	2678	Intersection /Full	2678	Full
3	468+06.36	Median Opening	2	Full	2678	Full	2678	Intersection /Full
3	496+29.70	Season Dr	2	Intersection /Full	2678	Full	1107	Intersection /Full
3	506+12.01	SR 87	2	Intersection /Full	1107	Intersection /Full	-	-

Table 2: Proposed Access Management Class and Spacing



### 5.0 CONCLUSION

In summary, the proposed project shall comply with State rules and provide controlled access along the proposed state highway. Spacing of median openings, signals, and connections shall comply with F.A.C., Chapter 14-97, where practical. The proposed alignment between US 90 and the proposed Blackwater River Bridge will provide access with driveway connections to the Sheriff's Office, Santa Rosa Correctional Institution, East Milton Park and commercial businesses. Full median openings are proposed at connections with Bobby Brown Road (Gulf Power station access), East Milton Road (prison access), Munson Highway (CR 191), Winston Brown Road, Trailride North Road (Alignment 2 only) and Season Drive (Alignment 2 only). Directional median opening is proposed at Opportunity Drive.

The recommended access management classification for the proposed SR 87 Connector facility is an <u>Access Class 3</u> for both Alignments 1 and 2. The SR 87 Connector will comply with FDOT's policy to assign an access classification of 2 or 3 to FIHS highways that are not freeways in order to preserve the safety and efficiency of the highways. Access Class 3 allows for full median openings to be constructed at each major connection along the SR 87 Connector and also matches the existing access management classifications on SR 87S and SR 87N.